



Naval Sea Systems Command Small Business Innovation Research Program

Carderock Industry Day

3 March 2015

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- **About NAVSEA**
- **How NAVSEA SBIR Benefits Small Businesses**
- **How SBIR Works**
- **How to Be Successful in NAVSEA SBIR**

Mission:

We design, build, deliver and maintain ships and systems on time, on cost for the United States Navy.

Vision:

We are the Nation's team accountable for the health of its Navy

- We must purposefully operate to ensure the U.S. Navy can protect and defend America.
- We must be supported by a modern, efficient industrial base.
- We must be a world-class employer of choice that inspires innovation.
- We must set the value-added standard for acquisition, engineering, business and maintenance.

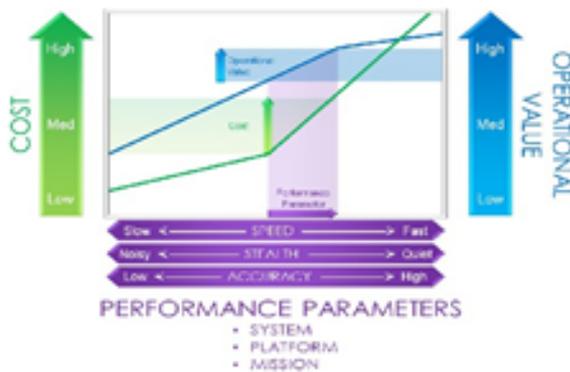
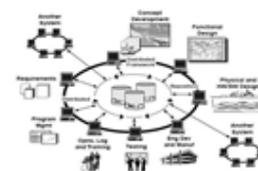


NAVSEA SBIR Program

- Seeks small business participation & technological innovation in support of NAVSEA R&D
- Selects SBIR efforts that contribute to filling critical NAVSEA technology gaps & Warfare Enterprise needs
- Seeks to implement SBIR products into NAVSEA weapons, platforms, & systems via transition to an acquisition program or through commercialization

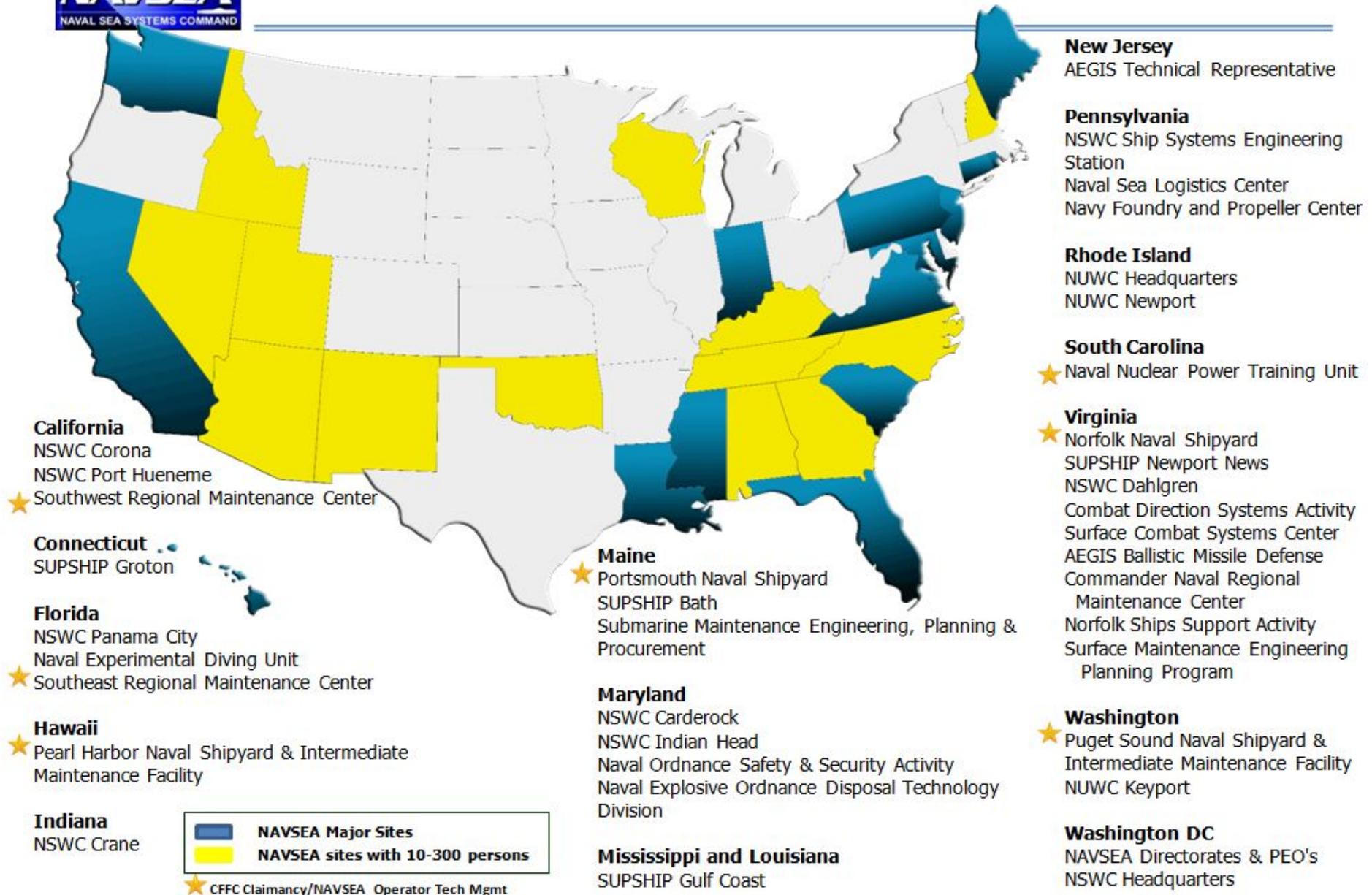
Core Objective – Phase III Transitions

- Ship or Platform Production, Operation, Maintenance, and Disposal Costs
- Naval Affordability, Capability, and Commonality
- Improved Information Management to Maximize Warfighter Effectiveness
- Design Tools and Systems for Performance, Capability, and Commonality
- Cybersecurity Products and Processes

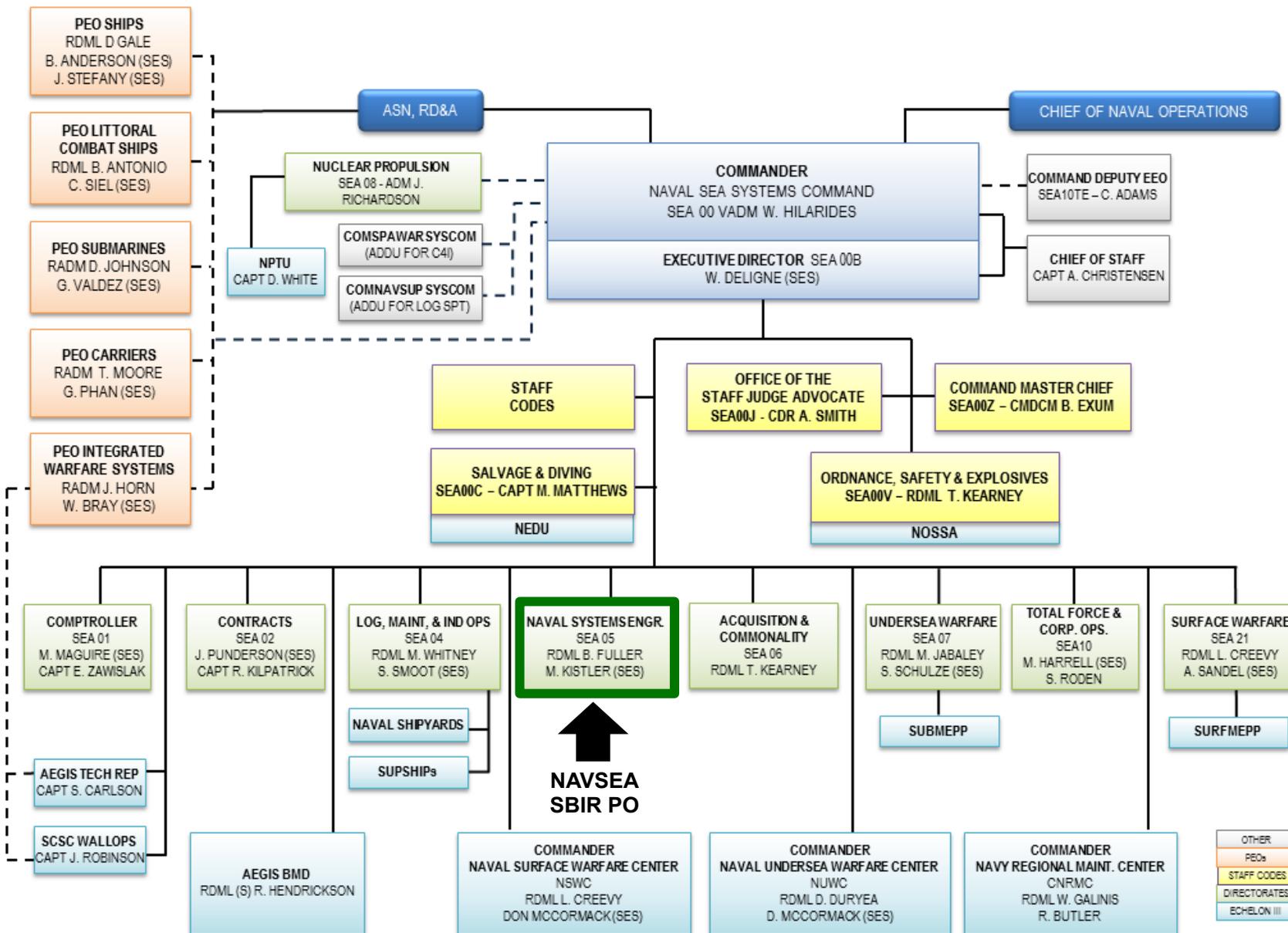


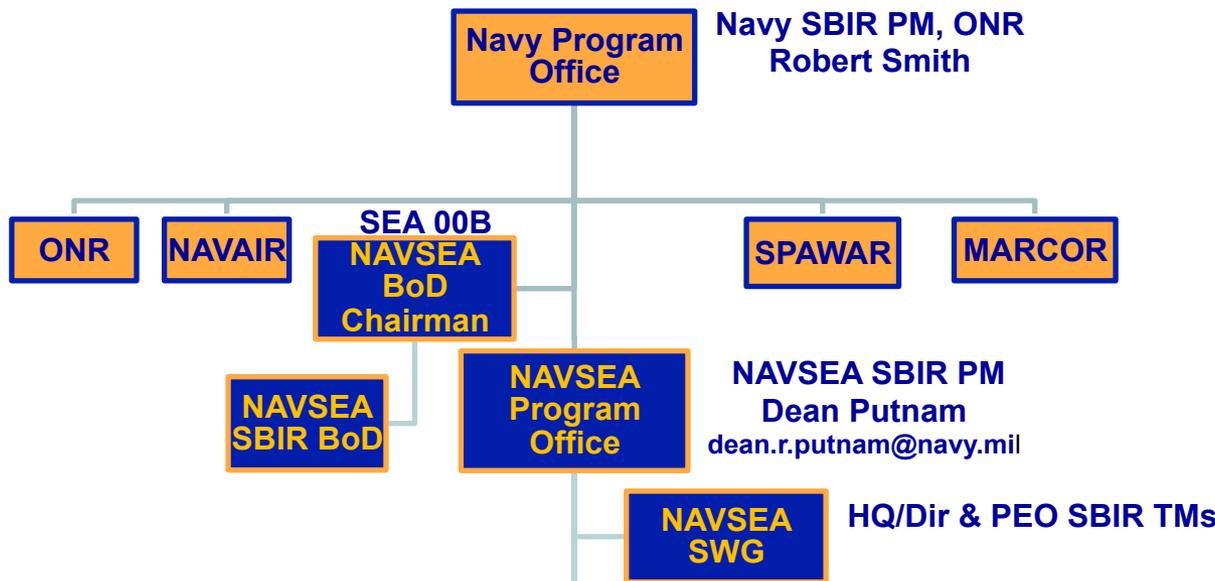


NAVSEA is located across the U.S.



NAVSEA Org Chart





**PEO CV
TM
Blenda Gately**
blenda.gately@navy.mil

Focuses on the design, construction and delivery, and life-cycle support of all aircraft carriers and the integration of systems into aircraft carriers.

**PEO IWS
TM
Douglas Marker**
douglas.marker@navy.mil

Manages surface ship and submarine combat technologies and systems, and coordinates Navy Open Architecture across ship platforms.

**PEO LCS
TM
Patrick Karvar**
patrick.karvar@navy.mil

Responsible for acquiring and maintaining the littoral mission capabilities of the LCS class ship.

**PEO SHIPS
TM
Robert Mitchell**
robert.t.mitchell@navy.mil

Manages acquisition and complete life-cycle support for all U.S. Navy non-nuclear surface ships.

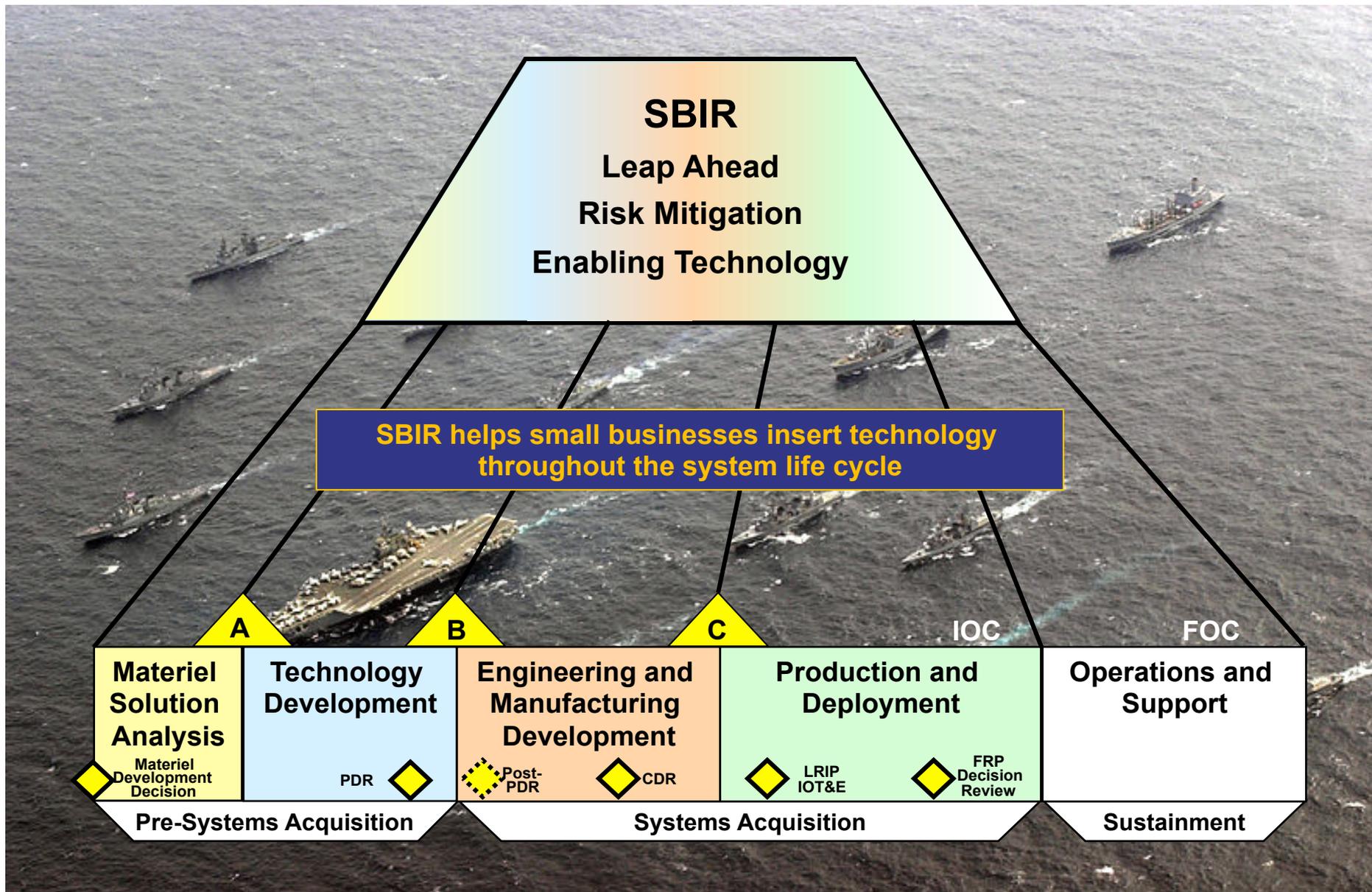
**PEO SUBS
TM
Lauren Pitre**
lauren.pitre@navy.mil

Focuses on the design, construction, delivery, and conversion of submarines and advanced undersea and anti-submarine systems

**NAVSEA Dir
TM
Ryan Shealy**
ryan.shealy@navy.mil

Focuses on the design, construction, delivery, and engineering needs for SEA05, SOCOMs, EOD and Divers

SBIR Supports the Full System Life Cycle



"The Power of SBIR!"

Technology Insertion and modernization budgets

- Develop once use many places
- Instant market for SBIR products/processes

CCSM

Darlington

SCS C4I & IM&M Technology
Combined Operations Wide
Area Network

Planning Systems

GCCS Development &
COTS Applications

DSR

Advanced Information
Systems
Software Migration Legacy
Trainer

Photonics Mast Workstation

MSI

Acoustics Sensors

RITE-Solutions

Mikel

Advanced Software

Trident Systems

Mobile Computing for
Submarine
Applications

TCN

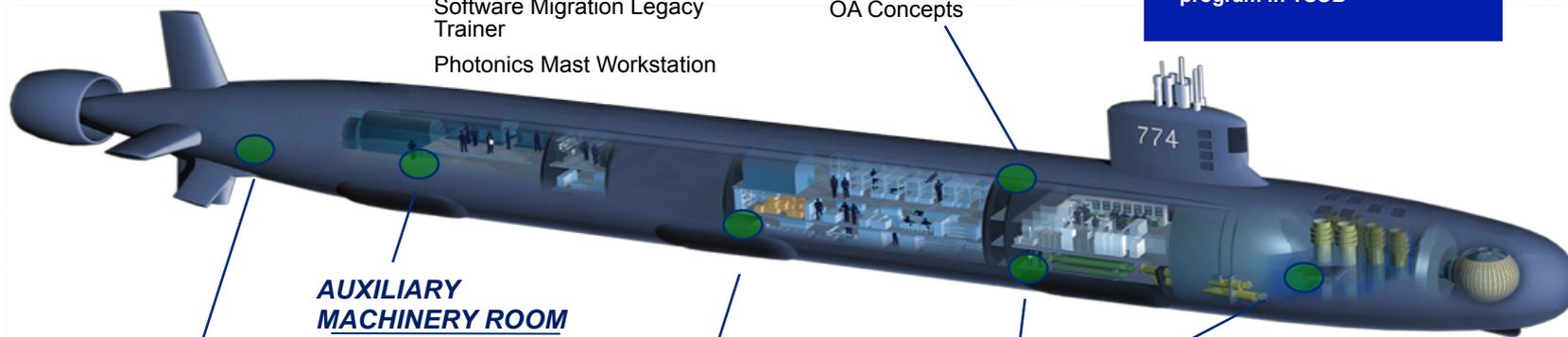
OA Concepts

Acquisition Coverage

- Blanket coverage by Major Ship programs
- Local coverage by PMOs

Leadership Commitment

- PEO leadership recognizes value
- SBIR is centerpiece of SB program in TSUB



STERN / PROPULSION

CSC

Array Improvement

AUXILIARY MACHINERY ROOM

Noesis

High Performance
Brushes Technology

PRESSURE HULL

CompuDrive

Electromechanical
Actuator and COMT

WEAPON LAUNCH, STOWAGE & HANDLING

Progeny

Tools for VME Interactive
Acoustic Analysis Process
Multi Tube Weapon
Simulator
Common Weapon Launcher



VIRGINIA Class Submarine

PEO LCS SBIR Technologies

MISSION PACKAGES

SHIP CREW SUPPORT



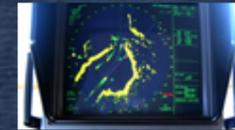
Synthetic Training



ASW
Mission
Planning



MCM COBRA



MCM Object
Categorization



MCM
RMMV
Effectiveness



UNMANNED VEHICLE COORDINATION



USV Situational
Awareness



Ship/UxV Secure Comms

SHIP SYSTEMS



Autonomous
Shipboard
Cleaning



Mission Package
Handling Systems

SBIR Technologies for DDG 51 Class Ships



LED Lighting



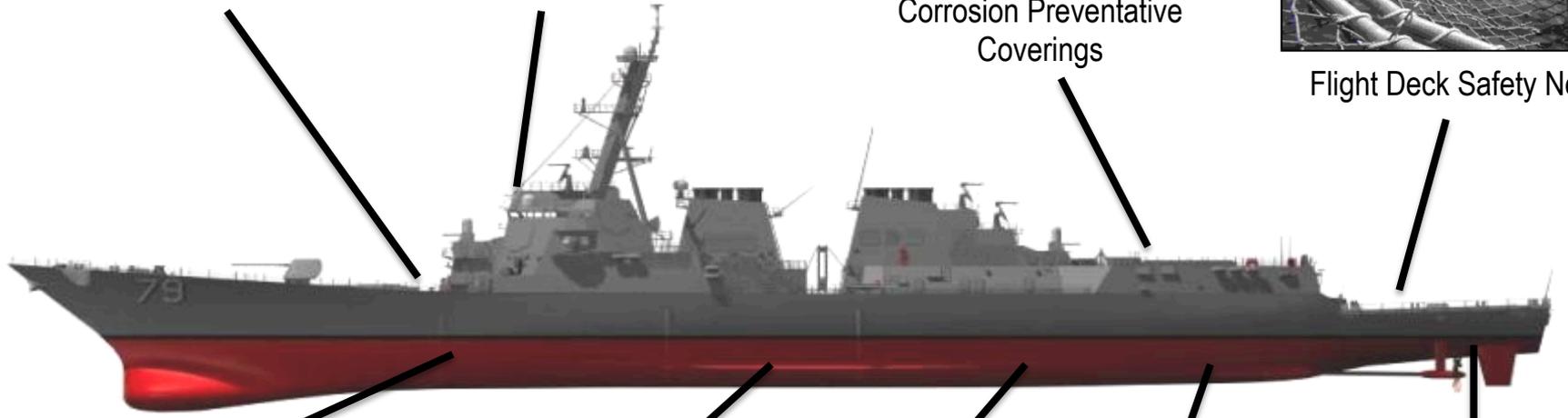
Advanced Bridge Windows



Corrosion Preventative Coverings



Flight Deck Safety Nets



Energy Dashboard
Fuel Management Decision Aid



Bulkhead Shaft Seal



On-line Wireless
Vibration Monitoring



High Temperature
Superconducting
Degaussing



Flight Deck Lighting
Controls



Small Businesses

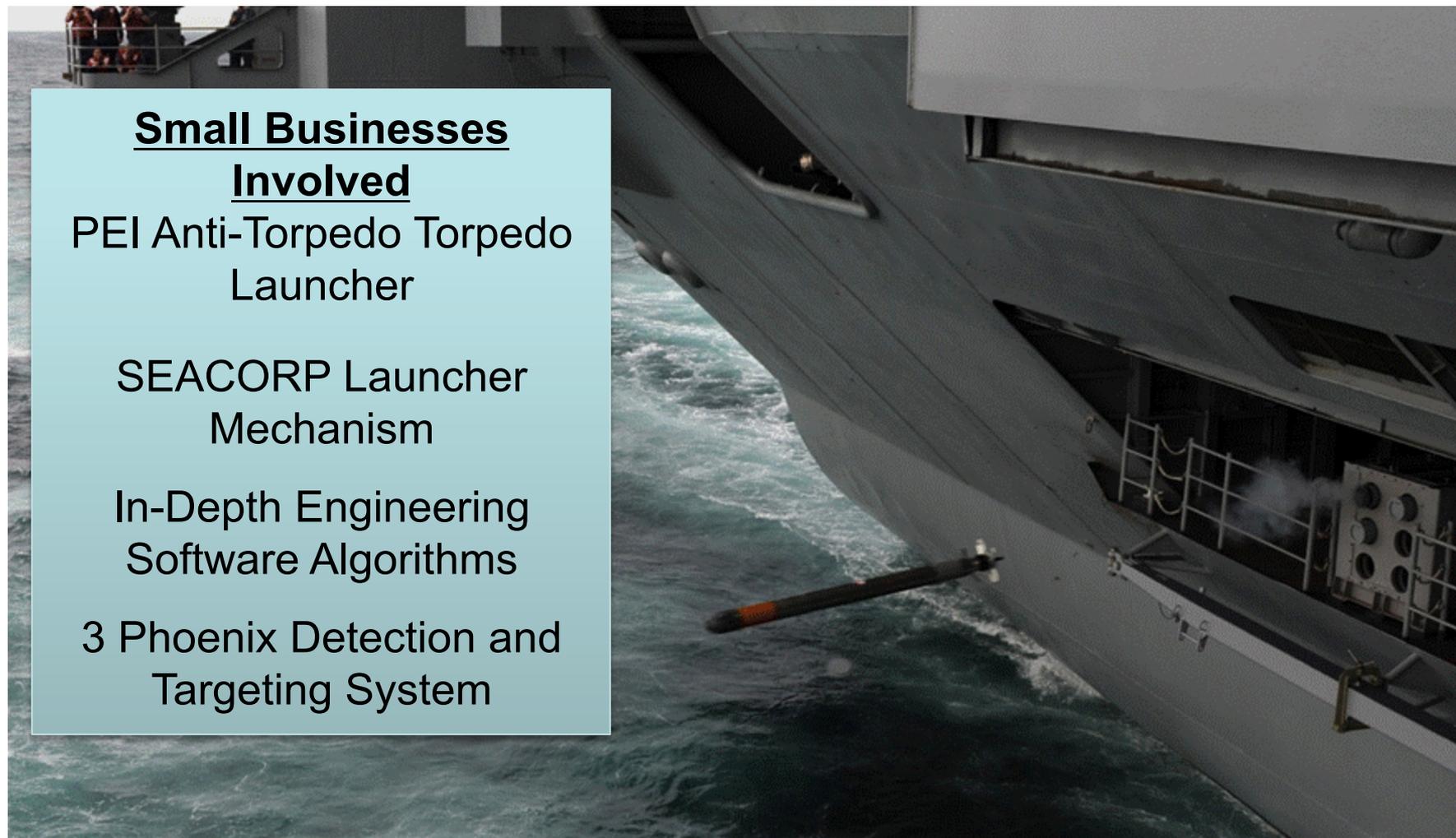
Involved

PEI Anti-Torpedo Torpedo
Launcher

SEACORP Launcher
Mechanism

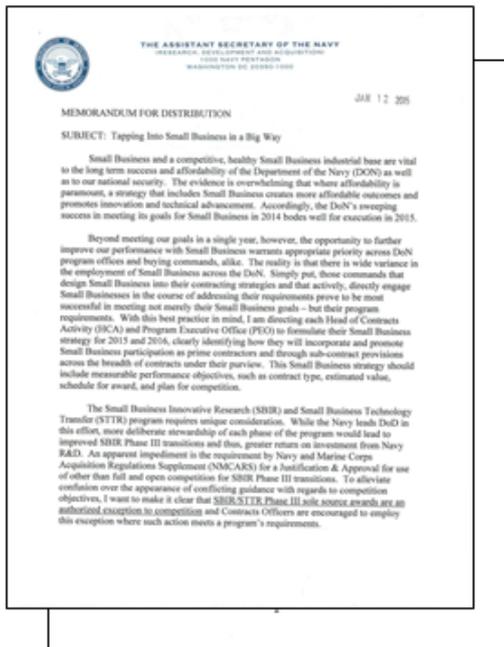
In-Depth Engineering
Software Algorithms

3 Phoenix Detection and
Targeting System

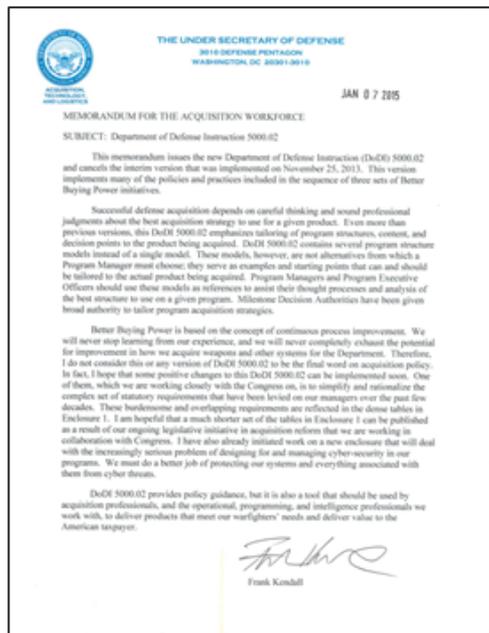


SBIR Success story – Supporting Real World Need for ATT

- **Small Business is Integral to NAVSEA Business Plan**
 - SBIR/STTR Program is Centerpiece at \$60M-\$65M each Year
 - NAVSEA has a History of over \$3B in Phase III Transitions



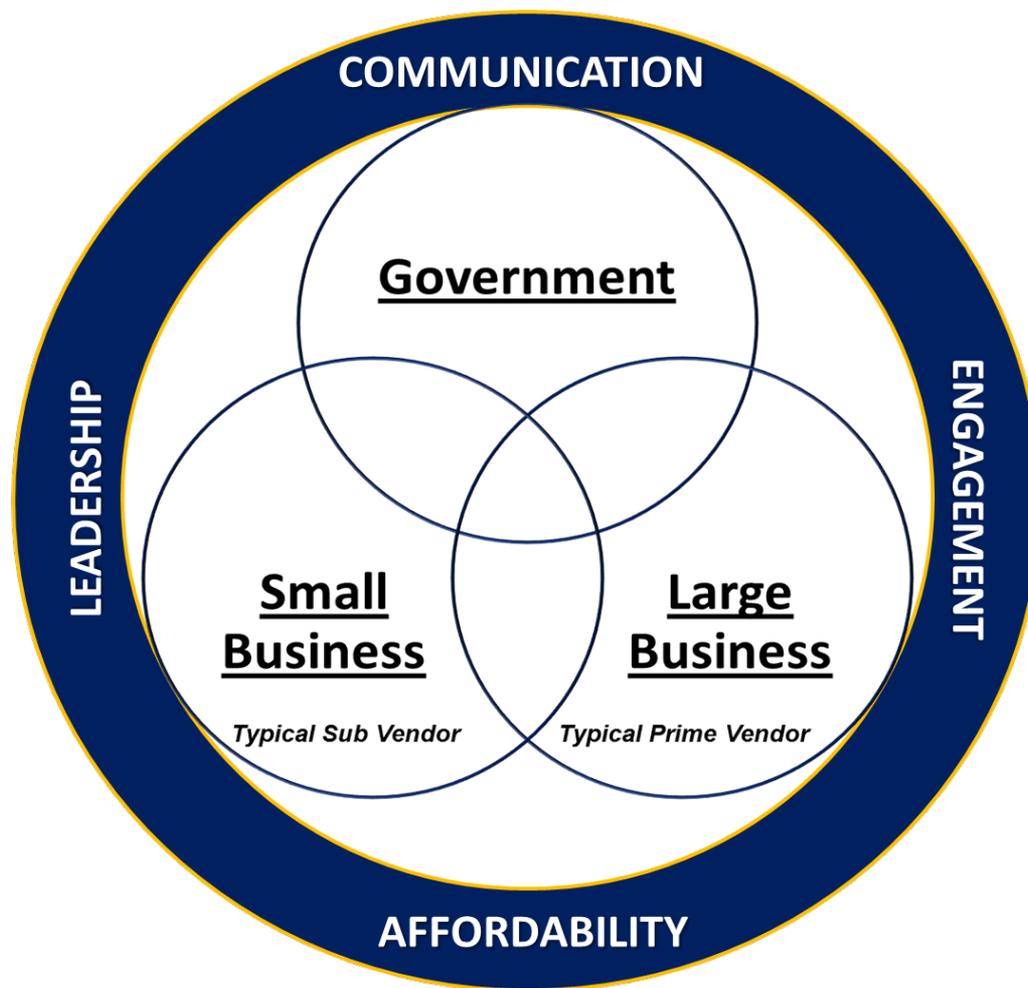
- PEOs Required to Formulate Small Business Strategy
- Promote Small Business Participation as Prime Contractors and Sub-Contract Provisions
- SBIR and STTR Requires Unique Consideration



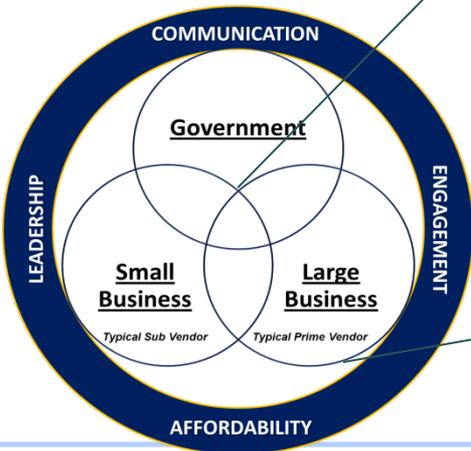
- SBIR/STTR's Need to be Tied into All Major Acquisition Programs (ACAT I-IV)
 - Programs Managers will Establish SBIR/STTR Goals
 - For \$100M+ Contracts, SBIR/STTR Subcontracting Plans are Required
 - SBIR/STTR Data Needs to be Collected, Reported, and is Reviewed at every Milestone

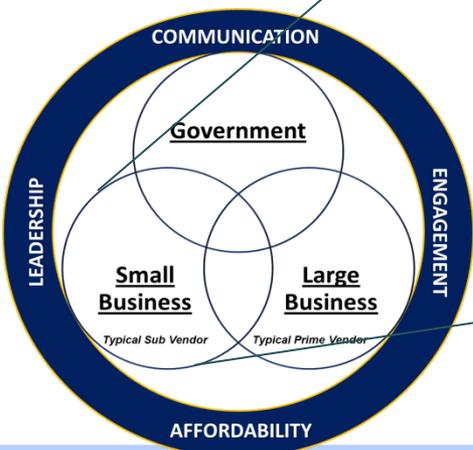
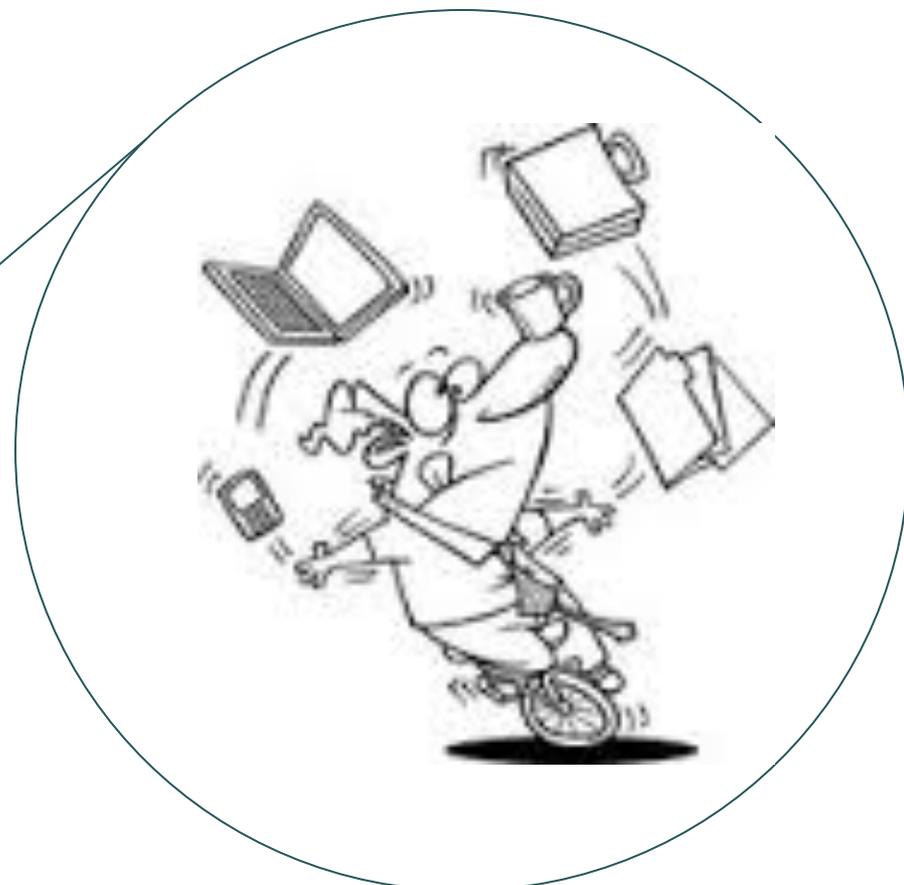
- **Average of 1 win per 8 proposals in Phase I**
- **Average of 15 proposals per topic in Phase I**
- **50% chance of Phase 2 award**
- **TAP participation and Opportunity Forum**

Good Ideas Never Expire

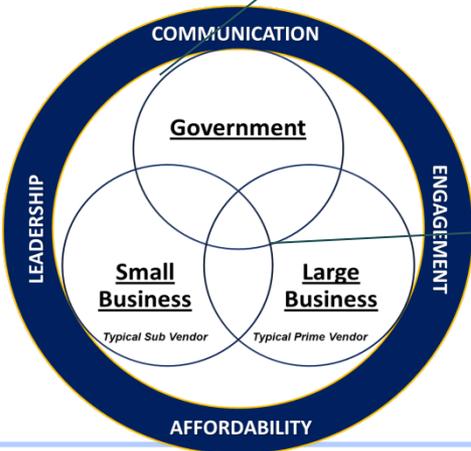
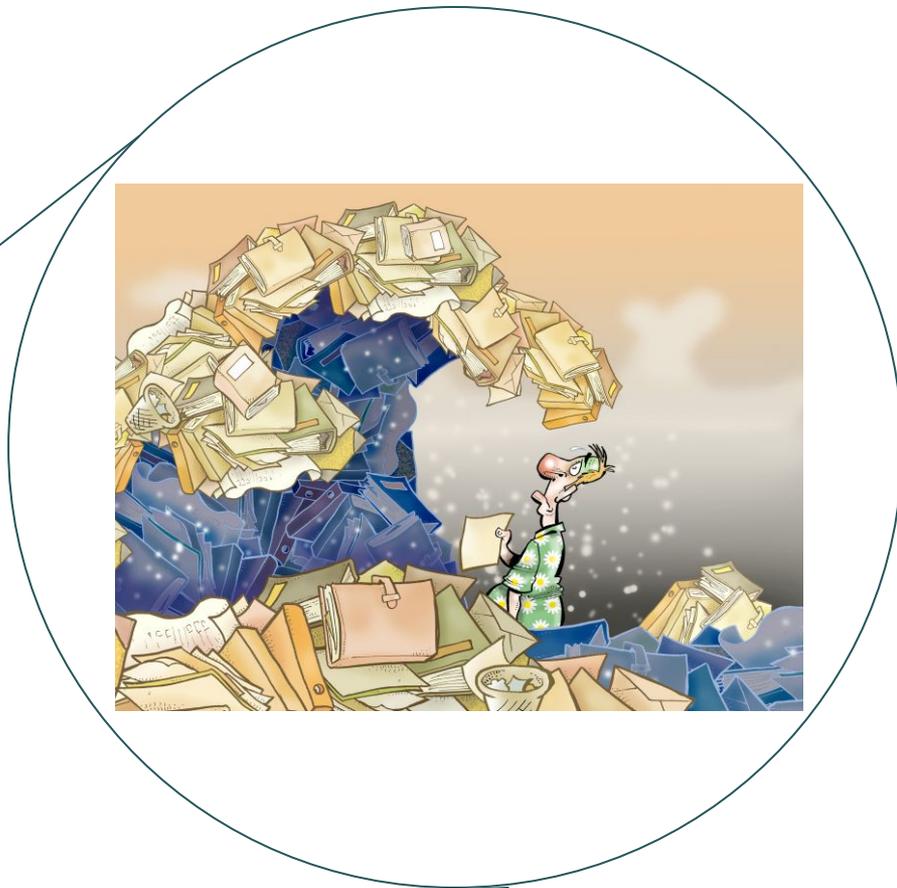


Circus of Acquisition: Big Business





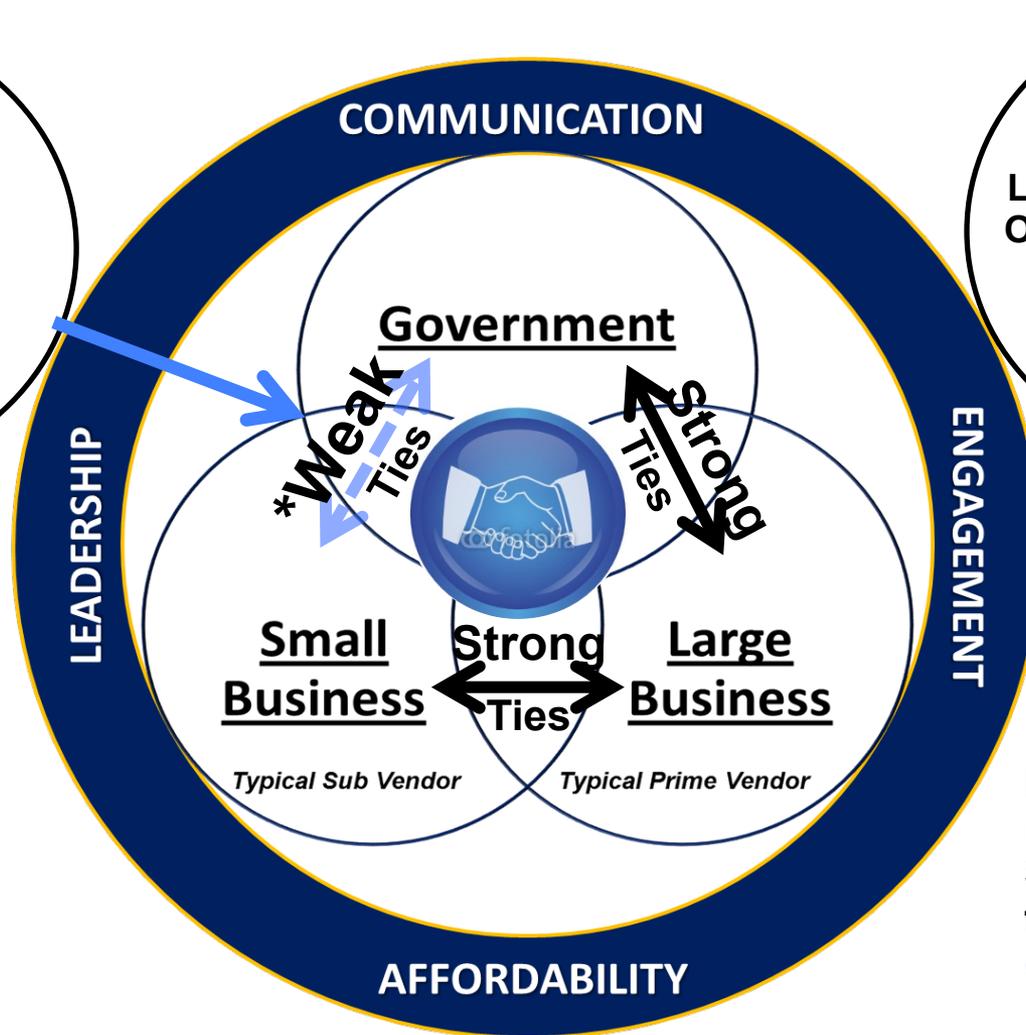
Circus of Acquisition: Government Requirements



Problem

Weak Ties
Between
Small Business
And Government

False sense of legalistic rules prevents full engagement between Government and Small Business



Opportunity

Ensure Government Leadership knows that Open engagement with Small Business is:
-Allowed-
-Encouraged-
-Valuable-

Key to getting the most value from Small Business is to **Increase Communications**

- #1 Key to **Success** for Getting Beyond Phase II is **Communication**
 - Phase I and Phase II Success: Know Your Customer
 - Phase III Transition Success: Know Your Customer, Your Suppliers, and Industry Partners
 - Navy Program Office
 - No longer a “Science Project”
 - Keep in Mind the “Need” are you filling

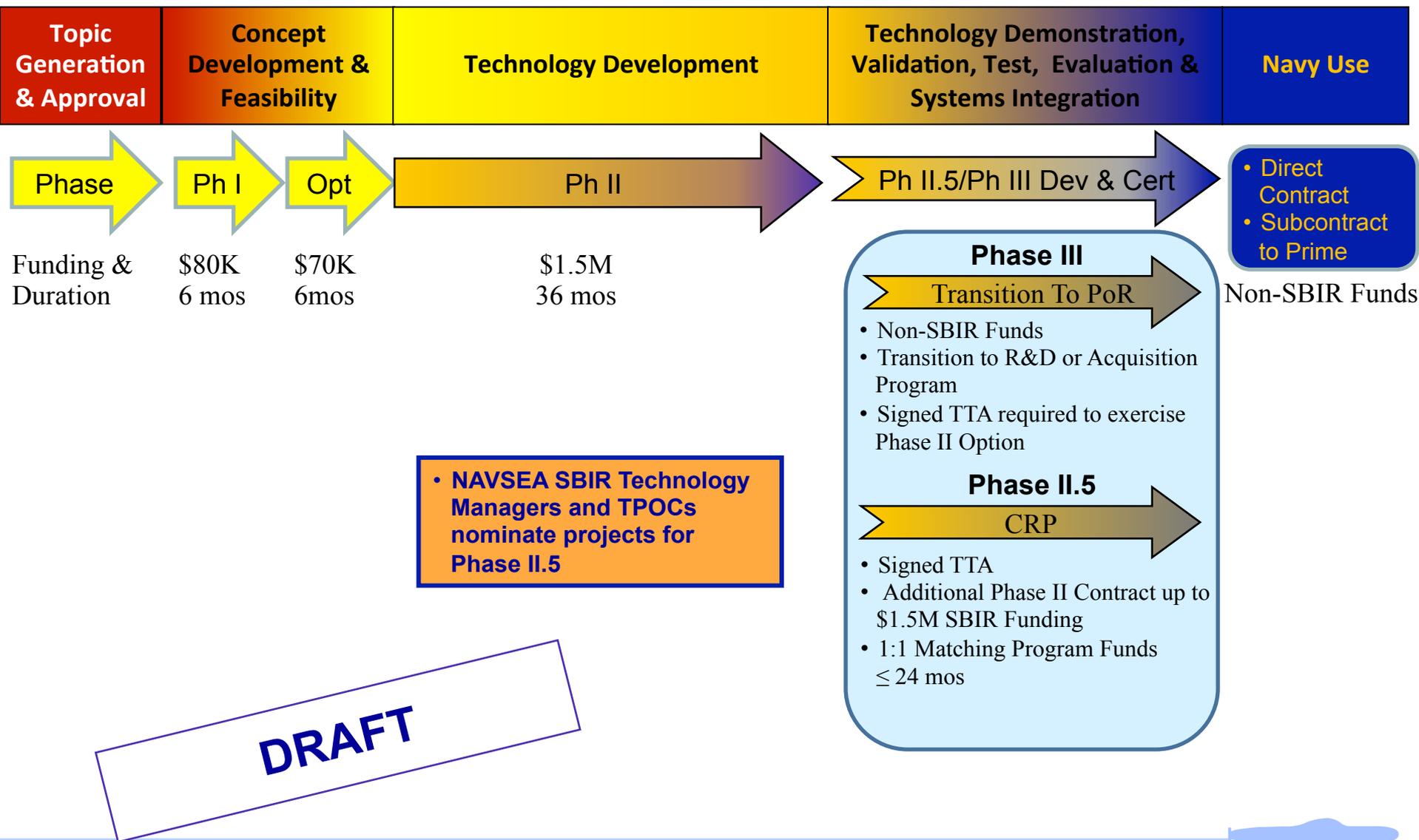
Beyond Phase II → Delivering Real Products

- **TPOC – gateway into the Government**
- **COR – reviews invoices against cost proposal and reports to Contracting Officer**
- Contracting Officer – responsible for all contracting actions and any changes
- Program Office Representative – usually sets requirements for transition
- **Technology Manager (TM) – manages SBIR efforts across the PEO (could assist in other transition targets)**
- Technical Warrant Holder (TWH) – gateway for technology insertion gateway for Navy platforms
- Technology Officer – Facilitates cross-platform consideration and connects with the TWH's

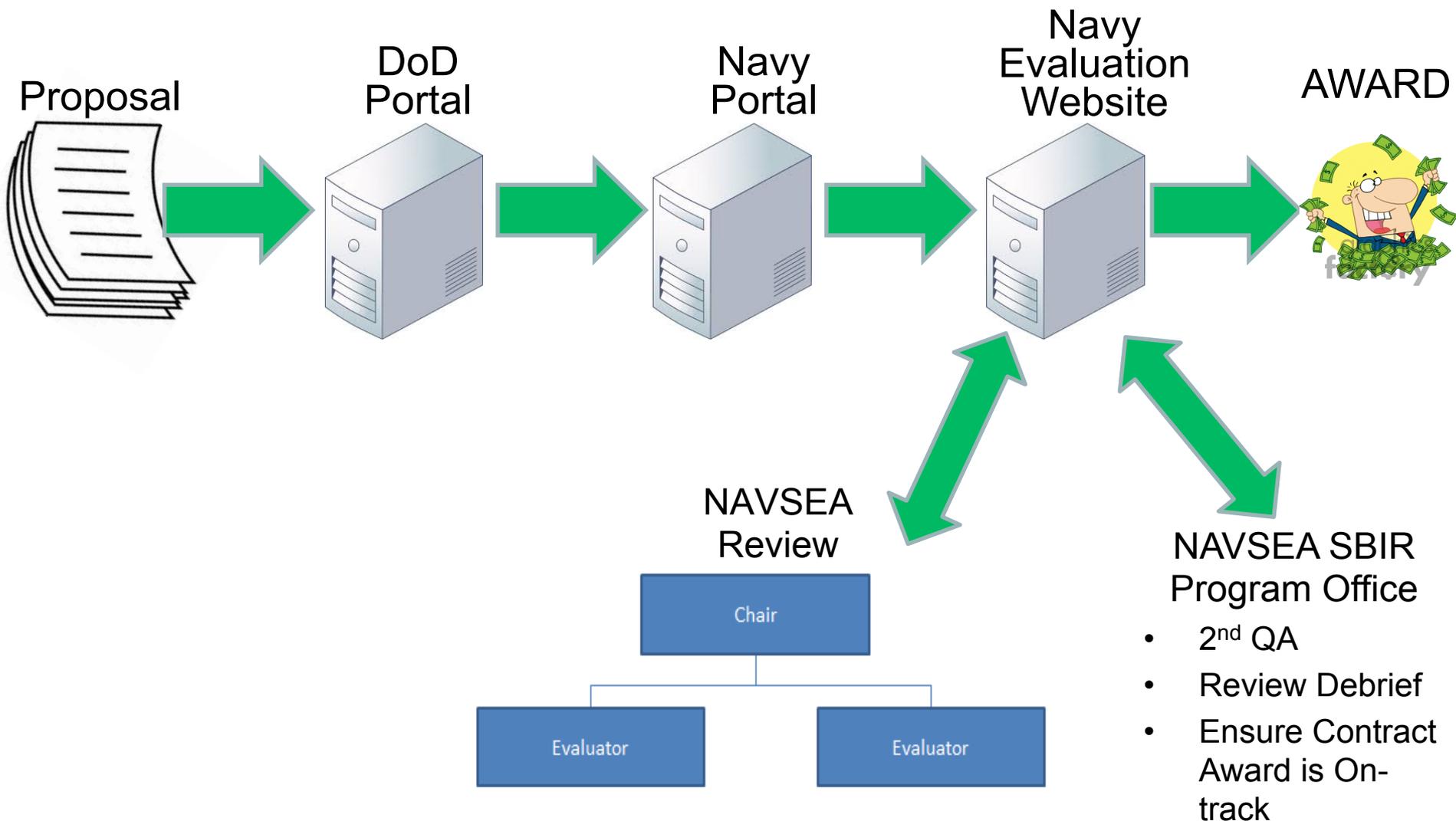
SBC should know them by name

- **Proposals are limited to 20 pages, including resumes for key personnel. Evaluators will not read beyond page 20 when evaluating and scoring proposals.**
- **Upon request, narratives are provided in written debriefs to unsuccessful companies.**
- **Proposals are scored on three criteria:**
 - Technical Merit (40%)
 - Quality of Personnel (30%)
 - Commercialization Potential (30%)

- **The Navy follows a two-step competitive process for Phase II:**
 - Initial Phase II Proposal
 - Any Phase I awardees may submit an initial Phase II proposal for evaluation and selection
 - Initial Proposal Limited to 15 Pages
 - Initial Proposal and the Submitted Final Report will be used for evaluation
 - Full Instructions and a Template for the initial Phase II proposal can be found on the “navysbir.com” website
 - Full Phase II Proposal
 - Selected initial Phase II offerors will be invited to submit a full Phase II proposal for evaluation and selection
- **Both Initial and full Phase II proposals are scored on three criteria:**
 - Technical Merit (40%)
 - Quality of Personnel (30%)
 - Commercialization Potential (30%)



What Happens to a Proposal?



- NAVSEA has
 - Well over \$3B in Phase III transitions
 - Adopted SBIR/STTR into our organization culture
 - Five PEOs
 - Directorates
- NAVSEA SBIR Board of Directors
- Adapted SBIR/STTR into our Program Management culture
 - Risk Reduction
 - Tech Insertion
 - Competition
 - Obsolescence Replacement

SBIR/STTR are great tools for NAVSEA and Small Business to learn and communicate about how to do business together!